

AMENDMENTS TO THE SPECIFICATION

Please amend Table 3 beginning on page 29 with the Table 3 as appended to this paper.

Please amend the paragraph beginning at page 7, line 15 as follows:

Figure 1 is a drawing illustrating misincorporation of a terminator wherein a double stranded DNA molecule with a strand containing an interrogation site of sequence 3'-CAACAGCAATCATACAGACAC(C/T)ATGACTTAC -5' (SEQ ID NO: 83) is used along with its complement sequence 5'-GTTGTCGTTAGTATGTCTGTG(G/A)TACTGAATG-3' (SEQ ID NO: 84) wherein a SNP primer 5'-TCGTTAGTATGTCTGTG-3' (SEQ ID NO: 85) is hybridized to a complementary strand with a C at the interrogation site is represented by sequence 3'-CAACAGCAATCATACAGACAC(C)ATGACTTAC -5' (SEQ ID NO: 86) or with a T at the interrogation site represented by the sequence 3'-CAACAGCAATCATACAGACAC(T)ATGACTTAC -5' (SEQ ID NO: 87) also wherein a reverse reaction of the DNA polymerase may produce a primer of sequence 5'-TCGTTAGTATGTCTGT-3' (SEQ ID NO: 88) may occur;

Please amend the paragraph beginning at page 19, line 7 as follows:

Table 1 illustrates primer sequences tested in a template directed dye terminator incorporation assay with fluorescence polarization detection (TDI-FP). Protocols for TDI-FP are described in U.S. Patent Nos. 6,180,408 and 6,440,707 and in examples detailed herein. In this table the template including an interrogation site is listed as "HapMap Marker" referring to a site

in a single nucleotide polymorphism database, see <http://www.ncbi.nlm.nih.gov/SNP/>. Each “HapMap Marker” is identified by a “code” which corresponds to a SNP site (dbSNP) as noted in Table 2 below. In these assays, combinations of two fluorescently labeled terminators are used as indicated in the column “Dye Combo.” The first terminator of each listed pair is labeled with the fluorescent dye R110 while the second terminator of the pair is labeled with the fluorescent dye Tamra. Each of the primers misincorporated a terminator having the fluorescent dye indicated in the column “Direction of Misincorporation.” In a majority of cases, the initial 3’ terminal nucleotide on the primer, shown in bold font, is identical to a base which would correctly hybridize with one of the two possible at the single nucleotide polymorphism interrogation site. Thus, phosphorolysis followed by incorporation of one of the two terminators gives erroneous results.